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# Cannabis as combined treatment in trigeminal neuralgia

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## Abstract

Trigeminal neuralgia is the most common craniofacial pain syndrome. This disorder causes severe facial pain and is described as very acute, short-lasting, similar to an electric shock to the jaw, eye region, teeth or gums, usually one-sided. Pharmacological therapies of trigeminal neuralgia, consist in antiepileptic drugs, but in extreme selected cases, surgery can also be considered.

Case Reports

A 78-year-old female patient (V.U.), was visited at the Pain Therapy-Hospice-Palliative Care-NAD medical clinic, located in Eboli (Asl Salerno).

The patient was already under pharmacological treatments for trigeminal neuralgia but, according to the patient, those prescribed cycled treatments were ineffective after a few months of use. In fact, the patient had taken over time: pain-relieving therapies with opioids, treatment with antiepileptics drugs, furthermore she had undergone PENS treatment (Percutaneous Electrical Nerve Stimulation therapy) elsewhere, which was also ineffective.

Therefore, she came to our medical observation because during treatment with antiepileptics (oxcarbazepine 600 mg a day), which were poorly effective, some side effects of that therapy appeared: hyponatremia (<130 mEq/L) and increased transaminases (AST/ALT >60 U/l).

After evaluating clinical aspects, the anamnesis and the history of previous treatment and with patient's informed consent, it was therefore decided to suspend the current therapy and to start treatment with Pregabalin up to 150 mg x 2 tabs a day, and Cannabis in oil (THC 17-26%, CBD < 1%) 30 mg a day.

We also decided to add to the medical therapy physical therapy with an interactive neuromodulation which was practiced in the same clinic in the presence of a physiotherapist.

Cannabinoid-based drugs act on the human endocannabinoid system, a network of CB1, CB2 and other receptors distributed throughout the body. Oral THC formulations show variable absorption and undergo extensive first-pass hepatic metabolism resulting in decreased concentration peak plasma THC compared to inhalation and a longer delay (~120 min) to reach peak concentration. Oral formulations may be useful for patients requiring symptomatic relief over a longer period.

In Italy, the prescription of cannabis for medical use is regulated by the Decree of the Ministry of Health of 9 November 2015. It can be prescribed through a treatment plan through the SSN (Italian National Health System) and used in chronic pain when associated with multiple sclerosis, spinal cord injury and other syndromes and only when conventional or standard therapies are ineffective.

We observed that cannabinoid treatment was effective. In the present clinical case, we obtained a reduction of NRS values > 50% after thirty days. Treatment with cannabinoids appears to have a high safety profile causing minimal side effects, by number and extent. The treatment was immediately effective, with pain relief more than 50%, return of electrolyte and transaminase values in a normal range and patient satisfaction.

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